

**WAC 296-17A-3701 Classification 3701.**

**3701-03 Ammonia, nitrogen and ammonium nitrate: Manufacturing**

Applies to establishments engaged in the manufacture of ammonia, nitrogen and ammonium nitrate. Ammonia is a colorless gas used as a component in fertilizer, medicines and cleaning compounds manufacturing. The manufacturing process involves combining hydrogen and nitrogen gases with a catalyst which causes a reaction between the two gases when heated in a generator. Ammonium nitrate is a crystalline compound used mainly in fertilizers, explosives and propellants. The manufacturing process involves combining ammonia and nitric acid in a reactor. Nitrogen is a colorless gas that is obtained from the air and processed by compressing air in a pressurized tank, removing impurities, and separating nitrogen and oxygen through heating.

**3701-04 Nitrate recovery from X-ray and photo films**

Applies to establishments engaged in recovering nitrate or silver from X-ray and photo films. The recovery process involves placing the films in developing solutions, ionizing the solution and separating the elements.

**3701-05 Dye and chemicals: Manufacturing**

Applies to establishments engaged in the manufacture of all types of dyes and in the manufacture of dyes and chemicals that are used exclusively for tinting candles. Organic and inorganic compounds such as, but not limited to, phenols, alcohols, caustics, acids, salts and gases are used in the manufacturing process. Manufacturing methods include, but are not limited to, weighing raw materials to specifications and pumping them into vats where they are heated, agitated and cooled. They are then filtered through presses, dried in ovens, ground into a powder, and then packaged. Liquid or paste forms of dye go through the same process with the exception of the drying and grinding operations.

**3701-06 Chemicals, N.O.C.: Manufacturing by nitration, alkylation and oxidation processes**

Applies to establishments engaged in the manufacture of chemicals not covered by another classification (N.O.C.) using a nitration, alkylation or oxidation process. Nitration involves the combining of nitrate with an organic compound to produce nitrobenzenes used in solvents, fertilizers and acids. Alkylation involves combining alkyls with other substances to form products used in the production of paper pulp, hard soap and petroleum products. Oxidation involves the combining of oxygen with other substances to produce products such as, but not limited to, hydrogen peroxide, protective metal coatings, and pharmaceutical preparations.

This classification excludes the manufacture of ammonia or nitrogen which is to be reported separately in classification 3701-03 and the manufacture of oxygen, hydrogen, acetylene gas, carbonic acid gas, or acids which is to be reported separately in classification 3701-10.

**3701-07 Chemical mixing, blending and repackaging only: Fireworks manufacturing**

Applies to establishments engaged exclusively in mixing, blending or repackaging chemicals; it does *not* apply to the manufacture of ingredients for the mixing operation. The product may be mixed by hand or through a mechanical process. The equipment used by establishments covered by this classification is limited to storage tanks, mixing or blending screens and vats, filling and packaging machines and miscel-

laneous equipment such as fork lifts and trucks. Fireworks are assembled by hand and using hand operated tools.

This classification excludes establishments involved in more than a mixing, blending or repackaging operation which are to be reported separately in the appropriate chemical manufacturing classification, and technicians who set up and carry out fireworks displays who are to be reported separately in classification 6207.

### **3701-08 Cosmetics: Manufacturing**

Applies to establishments engaged in the manufacture of cosmetics such as, but not limited to, soap, shampoo, hair conditioners, skin moisturizers, baby powder, lipstick, nail polish, bath oil, bath salts, and various personal care creams, gels or lotions. The process involves the mixing of premanufactured ingredients, using equipment such as storage tanks, mixers, heating devices, bottling/packaging/labeling equipment, and laboratory equipment for product development and quality control.

This classification excludes the manufacturing of the ingredients used in the mixing of the cosmetics.

### **3701-09 Drug, medicine, or pharmaceutical preparation: Manufacturing**

Applies to establishments engaged in the manufacture of pharmaceuticals including drugs, medicines, and preparations such as, but not limited to, tablets, pills, ointments, liquids, and powders. Processes contemplated by this classification include mixing or blending of the base medicinal ingredients and additives such as, but not limited to, sugars, starches, flavorings, and waxes used for coating tablets. Compounds are then pulverized, distilled, heated and/or dried.

This classification excludes:

- The manufacture or harvest of the ingredients used in the manufacture of the pharmaceuticals;
- Retail compounding pharmacy stores which are to be reported in 6406-16.

### **3701-10 Oxygen, hydrogen, acetylene gas, carbonic acid gas: Manufacturing**

Applies to establishments engaged in the manufacture of oxygen, hydrogen, acetylene gas, carbonic acid gas, dry ice, or acid. The manufacture of oxygen and hydrogen involves the recovery of these gaseous elements from the air by compression, expansion and cooling operations until it liquefies. The liquid air then goes to a fractionator where the oxygen is separated from the hydrogen along with other gases such as neon and helium. Acetylene is a highly flammable but nontoxic gas that is manufactured by reacting calcium carbide with water in a pressure generator which combines carbon and lime to form the end product. Carbonic acid gas, also known as phenol, is a caustic poisonous gas used in manufacturing resins, plastics, and disinfectants. The manufacture of phenol involves a compression and refrigeration process.

### **3701-11 Alcohol: Manufacturing, distilling, N.O.C.**

Applies to establishments engaged in manufacturing or distilling nonspirituous alcohol not covered by another classification (N.O.C.). Types of alcohol include, but are not limited to, methanol (wood alcohol), ethanol (grain alcohol) or denatured alcohol (combination of methanol and ethanol). Products produced include, but are not limited to, solvents, processing materials, germicides, antiseptics, or materials intended to be used as an ingredient in other products such as varnish and shellac. The processes for the production are varied depending on the type of alcohol and end product but all use a distilla-

tion process which involves the heating of liquids and subsequent condensation of vapors to purify or separate a substance contained in the original wood or grain product.

This classification excludes the manufacture of spirituous liquor which is to be reported separately in classification 3702 and gasohol distilling or refining which is to be reported separately in classification 3407.

**3701-13 Polish, dressing, or ink: Manufacturing**

Applies to establishments engaged in the manufacture of polish, dressings, or ink. Polish and dressing products include, but are not limited to, polish or dressings for shoes, leather, furniture, automobiles or metal. The ingredients and processes for polish and dressing manufacturing vary, depending on the end product. Typical ingredients include but are not limited to oils, waxes, resins, detergents, methanol, solvents, water and coloring. The process may involve a simple mixing operation or a more involved process involving heating or cooking and molding into a cake or stick form. Typical equipment includes, but is not limited to, weighing and measuring scales, mixers, stoves, molding apparatus, automatic filling, labeling, wrapping and packaging machines. Ink manufacturing covers all types of ink including, but not limited to, newspaper, book, magazine, and writing ink. The process involves the cooking of oils and resins which produces a resin. Pigments and dryers are blended into the resin mixture and diluted to proper consistency.

This classification excludes the manufacture of candles, crayons, and adhesives which is to be reported separately in classification 3701-25.

**3701-14 Extract: Manufacturing, including distillation of essential oils**

Applies to establishments engaged in the manufacture of extract including the distillation of essential oils. Extracts are concentrated forms of an essential component of a food or a plant. Extracts include, but are not limited to, flavorings, perfume oils, sachet powders, ingredients for skin conditioners and hop extracts used in the brewing of beer. The process involves extracting flavorings or oils from various plants, herbs or fruit peelings by pressing, cooking, steaming or distillation. The extracts may be mixed or blended with other extracts for strength, consistency or color and are then bottled or canned. Typical equipment includes, but is not limited to, steam cookers, presses, distillation apparatus, filters, grinders, tanks, vats and filling, packaging and labeling machines.

This classification excludes perfume manufacturing which is to be reported separately in classification 3701-15; mint distilling which is to be reported separately in classification 3701-17; and hop pellet manufacturing which is to be reported separately in classification 2101.

**3701-15 Perfume: Manufacturing, including distillation of essential oils**

Applies to establishments engaged in the manufacture of perfumes including the distillation of essential oils. Perfumes may be used as a personal fragrance or by other manufacturers such as in the making of scented candles. The process typically involves the distillation, cooking, grinding, compounding, drying, blending, or liquidizing of ingredients. These ingredients may include, but not be limited to, extracts, oils, colors and binders.

This classification excludes the manufacture of candles which is to be reported separately in classification 3701-25.

### **3701-17 Mint distilling**

Applies to establishments engaged in the distillation of mint. The process may begin with mint oil that is purchased from others or with the distillation of the mint leaves into mint oil. The mint leaves are chopped and blown into a mint steamer which lifts the moisture and oils from the mint. The resultant steam then goes through a series of condensation lines. Water is added to force the oil to the top of the liquid. The mint oil is heated for purification and to lessen the fragrance. Various mint oils may then be blended together to produce different types such as spearmint and peppermint. The product is then packaged in stainless steel or epoxy lined barrels.

This classification excludes the raising and harvesting of mint which is to be reported separately in classification 4811.

### **3701-20 Salt, borax or potash producing or refining**

Applies to establishments engaged in the production of or refining of salt, borax or potash. This classification includes the manufacture of common salt used in chemical and food processing, borax which is used in the manufacture of glass, glazes, soap, and boric acid, and potash which is used in fertilizer. Salt ores received from others are dissolved in water to produce a brine of the desired concentration. It is refined into common salt by adding caustic soda and soda ash. Potash is refined by adding an amine to the brine which causes the salts to float to the surface where they are skimmed off. Borax is made by separating it from the potash by a rapid cooling process. All three of these products are then fully evaporated by heating in a partial vacuum to produce crystals or granules which are then dried.

This classification excludes the production of raw materials used in the manufacture of these products.

### **3701-21 Serum, antitoxin or virus: Manufacturing**

Applies to establishments engaged in the manufacture of serums, antitoxins, or viruses. The process involves considerable microscopic laboratory work as well as working with animals. The animals are injected with bacteria and viruses, periodically bled and eventually killed. The killing of the animals is included in this classification as it is incidental and necessary to perform the operation to extract the serum from the glands and to separate the red blood cells from the blood.

This classification excludes the manufacture of other drugs or medicines which are to be reported separately in classification 3701-09.

### **3701-22 Paint, varnish or lacquer: Manufacturing**

Applies to establishments engaged in the manufacture of paint, varnish, lacquer, enamel, shellac, paint removers and thinners. The paint manufacturing process involves a series of mixing and grinding operations. The pigments (solids) are then blended with oils or resins (liquids). A paint extender may also be added at this point. The paint is then pumped into filling machines where various sized containers are filled and then labeled. Lacquer, varnish, enamel, shellac and paint removers and thinners vary in the ingredients used but the process is similar to that of paint manufacturing in that it is mainly a mixing operation. Varnishes involve a cooking process which is gener-

ally not used in the manufacture of the other products included in this classification.

This classification excludes the production of raw materials used in the manufacture of these products.

### **3701-23 Putty or synthetic resin: Manufacturing**

Applies to establishments engaged in the manufacture of putty or synthetic resin. Putty is a finely powdered chalk mixed with linseed oil. The main ingredients for both putty and synthetic resins are ground chalk, limestone and/or calcite. The process for both products involves grinding and mixing operations.

This classification excludes the production of the raw materials used in the manufacture of these products.

### **3701-25 Candle, crayon, and paste or glue: Manufacturing**

Applies to establishments engaged in the manufacture of candles, crayons, and synthetic adhesives such as paste or glue. Raw materials used for making candles include, but are not limited to, beeswax, paraffin, stearin, wicks and colors which are received from others. The wax is heated in kettles or similar devices into which the wicks are dipped either by hand or by dipping equipment which can be either manual or automated. A fragrance may be added to the melted wax for scented candles. When the wax has attained the desired shape and size it is hung on lines to dry. The wicks are then cut and the candles are placed in molds to shape the base of the candle. Color is then added by dipping either by hand for specialized designs or by machine for solid colors. The candles are then inspected, wrapped, packaged and labeled. Crayons use the same ingredients that are used in making candles with the exception of the wicks. The type of wax used in making crayons determines the hardness. The wax is melted in a kettle or similar device and poured into molds for shaping and cooling. The crayons are then inspected, packaged and labeled. Synthetic paste or glue is made from powder or granule arabic gum or modified starch which is received from others along with preservatives and the containers and caps. The process involves mixing and cooking the ingredients in steel tanks and pumping the product to a filling area where it is packaged, labeled and capped.

This classification excludes the manufacture of polish, dressing, or ink which is to be reported separately in classification 3701-13; the manufacture of glue from animal substances which is to be reported separately in classification 4301; and the production of raw materials used in the manufacture of these products.

### **3701-27 Hazardous/toxic material: Repackaging for disposal**

Applies to establishments engaged in *identifying and repackaging* hazardous/toxic materials for disposal. This classification is distinguished from classification 4305-20, in that classification 3701-27 applies to the *identifying and repackaging for disposal* of such materials as drugs, pesticides, chemicals, and toners that contain toxic or hazardous materials, while classification 4305-20 includes the *processing or handling* of such materials as medical or septic tank waste, drug lab or hazardous spill *cleanup*, and *reprocessing or handling* of low-level radioactive materials. For handling hazardous or toxic materials, the workers are equipped with protective clothing such as long sleeved shirts, depending on the material to which they will be exposed. They may also be equipped with steel toed boots, protective gloves, safety glasses and various types of respirator equipment. On a typical project, the first step is to visually inspect the materials

to see if they appear to be the materials described on a job order. If there is a question of identity, a sample of the material is sent to a lab for analysis. The establishment may have its own lab facilities or the sample may be sent to an outside lab, or the customer may have it analyzed. Every component of the sample must be identified. Once the material has been identified, and all containers labeled, the containers are separated into appropriate groupings. Smaller containers of similar types of materials are packed into 55 gallon drums with plastic or other cushioning protective material to prevent breakage. All necessary paper work and forms required by various government agencies must be completed before the material can be transported to a disposal site.

This classification excludes hazardous/toxic material *processing or handling*, including processing of medical or septic tank waste, drug lab or hazardous spill cleanup; reprocessing or handling of low-level radioactive materials which is to be reported separately in classification 4305-20; and the replacement of nontoxic toner in cartridges used in business machines which is to be reported separately in classification 4107.

[Statutory Authority: RCW 51.04.020 and 51.16.035. WSR 14-17-085, § 296-17A-3701, filed 8/19/14, effective 9/19/14. Statutory Authority: RCW 51.16.035, 51.16.100, 51.04.020(1). WSR 10-24-118, § 296-17A-3701, filed 12/1/10, effective 1/1/11. WSR 07-01-014, recodified as § 296-17A-3701, filed 12/8/06, effective 12/8/06. Statutory Authority: RCW 51.16.035. WSR 98-18-042, § 296-17-599, filed 8/28/98, effective 10/1/98; WSR 96-12-039, § 296-17-599, filed 5/31/96, effective 7/1/96; WSR 85-24-032 (Order 85-33), § 296-17-599, filed 11/27/85, effective 1/1/86; WSR 83-24-017 (Order 83-36), § 296-17-599, filed 11/30/83, effective 1/1/84; WSR 82-24-047 (Order 82-38), § 296-17-599, filed 11/29/82, effective 1/1/83. Statutory Authority: RCW 51.04.020(1) and 51.16.035. WSR 78-12-043 (Order 78-23), § 296-17-599, filed 11/27/78, effective 1/1/79; Order 74-40, § 296-17-599, filed 11/27/74, effective 1/1/75; Order 73-22, § 296-17-599, filed 11/9/73, effective 1/1/74.]